

Increasing pnn2 acceptance: from 1apr04

(<http://www.phy.bnl.gov/~djaffe/E949/status.1apr04.v1.ps.gz>)

Loosen FITPI cuts wrt E949 pnn1 and improve FITPI:

1. Try to increase efficiency for early $\pi \rightarrow \mu$
2. Expand π decay time from $\sim 4\tau_\pi$ to $\sim 5\tau_\pi$
3. Better z-corrections?

Items 1,2 estimated to give 1% increase in acceptance

Item 3 would take > 1 month

Improve B4EKZ likelihood **Need estimate of acceptance increase:**

- Use MWPC info (beam angle correlated with beam energy)?
- Use TGZ ‘quality’ such as χ^2 of Z-fit ?
- Add in TT edge fibers for E(K)?

Reduce DELCO? (now 6 ns)

YES

Use K stops in IC? (requires TD pulse-fitting)

What acceptance increase for pnn1?

Increase P,R,E box size?

YES

Kalman filter for TT? (correlates E & P)

NO